



Form PTO 1449

ATTY DOCKET NO. 64-98A
APPLICANT: Aebersold et al.

SERIAL NO. 09/839,884

FILING DATE: April 20, 2001

GROUP: 1632

TECH CENTER 1600/2600

RECEIVED
FEB 22 2002

U.S. PATENT DOCUMENTS

Exmr Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
86	1	6,017,693	01/25/00	Yates, III et al.	435	5	—
86	2	5,952,653	09/14/99	Covey et al.	250	288	—
86	3	5,686,310	11/11/97	Haystead et al	436	86	—
86	4	5,650,270	07/22/97	Giese et al.	435	6	—
86	5	5,538,897	07/23/96	Yates, III et al.	436	89	—
86	6	5,240,859	08/31/93	Aebersold	436	89	—

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes/No
86	7	WO98/26095	06/18/98	PCT	C12Q	1/68	✓
86	8	WO 01/96869 A1	20/12/01	WO	G01N	33/53	✓

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

86	9	Aebersold, R. et al. (1991) "Determination of the site of tyrosine phosphorylation at the low picomole level by automated solid-phase sequence analysis" <i>Anal. Biochem.</i> 199:51-60
86	10	Bennetzen, J.L. and Hall, B.D. , "Codon Selection in Yeast," (March 1982) <i>J. Biol. Chem.</i> 257(6):3026-3031
86	11	Boucherie, H. et al. (1996) "Two-dimensional gel protein database of <i>Saccharomyces cerevisiae</i> " <i>Electrophoresis</i> 17:1683-1699
86	12	Bruce, J. E. et al. (January 2000) "Obtaining More Accurate FTICR Mass Measurements Without Internal Standards using Multiply Charged Ions" <i>J. Am. Soc. Mass Spec.</i> 11(5):416-421
86	13	Bruce, J.E. et al. (July 1999) "High-Mass-Measurement Accuracy and 100% Sequence Coverage of Enzymatically Digested Bovine Serum Albumin from an ESI-FTICR Mass Spectrum" <i>Anal. Chem.</i> 71(14):2595-2599

EXAMINER

<i>Shilene R. Babel</i>	DATE CONSIDERED	5/17/02
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		



RECEIVED

TECH CENTER

FEB 22 2002
60012900

Form PTO 1449		
ATTY DOCKET NO. 64-98A	SERIAL NO. 09/839,884	FILING DATE: April 20, 2001
APPLICANT: Aebersold et al.		GROUP: 1632

88	14	Davis, T. et al. (March 1998) "Rapid Protein Identification Using a Microscale Electrospray LC/MS System on an Ion Trap Mass Spectrometer," <i>J. Am. Soc. Mass. Spec.</i> 9:194-201
88	15	Fenyo, D. et al. (May 1998) "Protein identification using mass spectrometric information," <i>Electrophoresis</i> 19:998-1005
88	16	Fraser, C.M. et al. (Dec 1997) "Genomic sequence of a Lyme disease spirochaete, <i>Borrelia burgdorferi</i> ," <i>Nature</i> 390:580-586
88	17	Futcher, B. et al. (November 1999) "A Sampling of the Yeast Proteome" <i>Mol. Cell. Bio.</i> 19(11):7357-7368
88	18	Gingras, A.C. et al. (June 1999) "Regulation of 4E-BP1phophorylation: a novel two-step mechanism" <i>Genes Dev.</i> 13:1422-1437
88	19	Goffeau et al. (Oct 1996) "Life with 6000 Genes," <i>Science</i> 274:546-549
88	20	Goodlett et al. (1993), "Reduced Elution Speed Detection for Capillary Electrophoresis/Mass Spectrometry" <i>J. Microcolumn Separations</i> 5:57-62
88	21	Goodlett, D.R. et al. (March 2000) "Protein identification with a single accurate mass of a cysteine-containing peptide and constrained database searching" <i>Anal. Chem.</i> 72(6):1112-1118
88	22	Goodlett, D.R. et al. (March 2000) "Quantitative in Vitro kinase reaction as a guide for phosphoprotein analysis by mass spectrometry" <i>Rapid Commun Mass Spectrom.</i> 14(5):344-348
88	23	Graves, J.D. & Krebs, ED. (May 1999) "Protein phosphorylation and signal transduction" <i>Pharmacol. Ther.</i> 82:(2-3)111-121
88	24	Gygi, S.P. and Aebersold, R. (October 2000) "Mass spectrometry and proteomics" <i>Curr. Opin. Chem. Biol.</i> 4(5):489-94
88	25	Gygi, S.P. et al. (August 2000) "Measuring gene expression by quantitative proteome analysis" <i>Curr. Opin. Biotechnol.</i> 11(4):396-401
88	26	Haynes, P.A. et al. (1998) "Proteome Analysis: Biological Assay or Data Archive?" <i>Electrophoresis Vol.</i> 19:1862-1871
88	27	Henzel, W.J. et al. (June 1993) "Identifying proteins from two-dimensional gels by molecular mass searching of peptide fragments in protein sequence databases," <i>Proc. Natl. Acad. Sci. USA</i> 90:5011-5015

EXAMINER	<i>Brigene R. Bobb</i>	DATE CONSIDERED	5/17/02
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>			



Page 3

Form PTO 1449		
ATTY DOCKET NO. 64-98A		SERIAL NO. 09/839,884
APPLICANT: Aebersold et al.		FILING DATE: April 20, 2001 GROUP: 1632

RECEIVED
FEB 22 2002
U.S. PATENT & TRADEMARK OFFICE

88	28	Horn, D. M. et al. (1998) "A Computer Program for Automated Analysis of High Resolution Mass Spectra," <i>Proceedings of the 46th ASMS Conf. on Mass Spectrometry and Allied Topics</i> , Orlando, FL May 31 - June 4, 1998, p.118
88	29	Hunter, T. (1994) "1001 protein kinases redux—towards 2000" <i>Semin. Cell Biol.</i> 5:367-376
88	30	Jonscher, K.R. and Yates, J.R. III, (January 1997) "Matrix-assisted laser desorption ionization/quadrupole ion trap mass spectrometry of peptides. Application to the localization of phosphorylation sites on the P protein from Sendai virus" <i>J. Biol. Chem.</i> 272(3):1735-1741
88	31	Koch, C.A. et al. (1991) "SH2 and SH3 domains: elements that control interactions of cytoplasmic signaling proteins" <i>Science</i> 252:668-674
88	32	Laemmli, U.K. (August 1970) "Cleavage of Structural Proteins during the Assembly of the Head of Bacteriophage T4," <i>Nature</i> 227:680-695
88	33	Lee et al. (January 1998) "HLA-E Surface Expression Depends on Binding of TAP-Dependent Peptides Derived from Certain HLA Class I Signal Sequences," <i>J. Immunol.</i> 160:4951-4960
88	34	Link, J. et al. (July 1999) "Direct analysis of protein complexes using mass spectrometry," <i>Nat. Biotech.</i> 17:676-682
88	35	Lundell, N. and Schreitmuller, T. (January 1999) "Sample Preparation for Peptide Mapping - A Pharmaceutical Quality-Control Perspective," <i>Anal. Biochem.</i> 266:31-47
88	36	Marshall et al. (May 1998) "Fourier Transform Ion Cyclotron Resonance Mass Spectrometry: A Primer," <i>Mass. Spectrom. Rev.</i> 17:1-35
88	37	McCormack, A.L. et al. (1997) "Direct Analysis and Identification of Proteins in Mixtures by LC/MS/MS and Database Searching at the Low-Femtomole Level" <i>Anal. Chem.</i> 69:767-776
88	38	Mosely, M.A. et al. (1991) "Nanoscale Packed-Capillary Liquid Chromatography Coupled with Mass Spectrometry Using a Coaxial Continuous-Flow Fast Atom Bombardment Interface," <i>Anal. Chem.</i> 63:1467-1473
88	39	Neubauer, G. et al. (Sept 1998) "Mass spectrometry and EST-database searching allows characterization of the multi-protein spliceosome complex," <i>Nature Genetics</i> 20:46-50
88	40	Ogryzko, Vasily V. et al. (July 10, 2998), "Histone-like TAFs within the PCAF Histone Acetylase Complex" <i>Cell</i> 94:35-44.
88	41	Papayannopoulos, I.A. (1995) "The interpretation of collision-induced dissociation tandem mass spectra of peptides" <i>Mass Spectrometry Rev.</i> 14:49-73

EXAMINER	<i>Brooks R. Smith</i>	DATE CONSIDERED	<i>5/17/02</i>
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			



Form PTO 1449		
ATTY DOCKET NO. 64-98A	SERIAL NO. 09/839,884	FILING DATE: April 20, 2001
APPLICANT: Aebersold et al.	GROUP: 1632	

RECEIVED
FEB 22 2002
TECH CENTER 1600
1600
1600

88	42	Patterson, S.D. and Aebersold, R. (1995) "Mass spectrometric approaches for the identification of gel-separated proteins," <i>Electro.</i> 16:1791-1814
88	43	Qin, J. et al. (January 1998) "De Novo Peptide Sequencing in an Ion Trap Mass Spectrometer with ¹⁸ O Labeling" <i>Rapid Communications in Mass Spectrometry</i> 12:209-216
88	44	Qin, J. and Chait, B.T. (1997) "Identification and characterization of posttranslational modifications of proteins by MALDI ion trap mass spectrometry" <i>Anal. Chem.</i> 69(19):4002-4009
88	45	Susin et al. (February 1999) "Molecular Characterization of Mitochondrial apoptosis-inducing factor," <i>Nature</i> 397:441-446
88	46	Verma, R. et al. (1997) "Phosphorylation of Sic1p by G ₁ Cdk required for its degradation and entry into S Phase" <i>Science</i> 278(5337):455-60
88	47	Watts, J.D. et al. (1994) "Identification by electrospray ionization mass spectrometry of the sites of tyrosine phosphorylation induced in activated Jurkat T cells on the protein tyrosine kinase ZAP-70" <i>J. Biol. Chem.</i> 269(47):29520-29529
88	48	Winger et al. (1993) "High-Resolution Accurate Mass Measurements of Biomolecules Using a New Electrospray Ionization Ion Cyclotron Resonance Mass Spectrometer," <i>J. Am. Soc. Mass Spec.</i> 4:566-577
88	49	Zhou, H. et al. (April 2001) "A Systematic approach to the analysis of protein phosphorylation" <i>Nature Biotechnol.</i> 19:375:378

EXAMINER	<i>Brinley R. Brink</i>	DATE CONSIDERED	5/17/02
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

Form PTO-1449
PATENT DOCKET NO. 64-98A SERIAL NO. 09/839,884 FILING DATE April 20, 2001
APPLICANT Aebersold GROUP 1641

WL 07 2004

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

FOREIGN PCT DOCUMENTS						
	Document Number	Date	Country	Class	Subclass	Translation Yes/No
88	98/32876	07/30/98	WO	C12Q	1/37	
88	99/02728	01/21/99	WO	C12Q	1/68	
88	99/02726	01/21/99	WO	C12Q	1/68	

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

86		"Advanced Organic Chemistry. Reactions, Mechanisms and Structure," Jerry March, (1985), Wiley & Sons, Inc., p. 191 <i>only</i>
87		Cho, A.K. et al. (March 1973), "Deuterium Substituted Amphetamine as an Internal Standard in a Gas Chromatographic/Mass Spectrometric (GC/MS) Assay for Amphetamine," <i>Anal. Chem.</i> 45(3):570-574
87		Cowen, A.E. et al. (1976) Synthesis of 11,12- ² H ₂ - and 11,12- ³ H ₂ -labeled chenodeoxycholic and lithocholic acids," <i>J. Lipid Res.</i> 17:231-238
87		Desiderio, D.M. and Kai, M. (1983), "Preparation of Stable Isotope-Incorporated Peptide Internal Standards for Field Desorption Mass Spectrometry Quantification of Peptides in Biologic Tissue," <i>Biomed. Mass Spectrom.</i> 10:98): 471-479
87		Hawley's Condensed Chemical Dictionary, Twelfth Ed., Richard J. Lewis, Sr., (1993), p. 663 <i>only</i>
87		Heck, H.D'A. et al. (1979), "Bioavailability of Imipramine Tablets Relative to a Stable Isotope-Labeled Internal Standard: Increasing the Power of Bioavailability Tests," <i>J. Pharm. Biopharm.</i> 7(3):233-248
87		Horning, M.G. et al. (1974), "The Use of Stable Isotopes in Gas Chromatography-Mass Spectrometric Studies of Drug Metabolism," <i>J. Chromatogr.</i> 91:413-423
88		Julka, S. and Regnier, F. (January 2004), "Quantification in Proteomics through Stable Isotope Coding: A Review," <i>J. Proteome Res.</i> 3:350-363
88		3 rd Sienna Conference: "From Genome to Proteome"; Oral Plenary Session 3, Y.P. Rochon et al.; "Stable Isotope Metabolic Labelling Coupled with Mass Spectrometry" A Rigorous Method of Quantitative Analysis of Protein Expression and Intermolecular Interactions"; Presented 14 50-15.00, 31 August 1998
88		Pierce Product Catalogue, pages 64-73, published 1997

EXAMINER *Donielle R. Dahl* DATE CONSIDERED *7/19/04*

Form PTO-1449
ATT~~E~~ DOCKET NO. 64-98A | SERIAL NO. 09/839,884 | FILING DATE April 20, 2001
APPLICANT Aebersold | GROUP I1641

JUN 22 2004

U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
88	6,156,527	12/05/00	Schmidt et al.	435	24	

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes/No
88	WO98/32876	07/30/98	PCT	C12Q	1/37	
88	1 027 454	08/13/03	EP	C12Q	1/37	

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER *Dorisene R. Gable* DATE CONSIDERED 7/19/04



Sheet 1 of 6

Form PTO-1449

ATTY DOCKET NO. 64-98 A	SERIAL NO. 09/839,884	FILING DATE April 20, 2001
APPLICANT Aebersold et al.		GROUP 1632

Previously cited in 09/383,062

TECH CENTER 6000
JAN 17 2002
602900

RECEIVED

U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	4,798,795	01/17/89	Sigler	435	177	
	5,514,559	05/07/96	Marker-Hahn et al.	435	7.92	
	5,527,711	06/18/96	Tom-Moy et al.	436	518	
	5,534,132	07/09/96	Vreeke et al.	205	777.5	
	5,614,368	03/25/97	Ghazarossian et al.	435	7.5	
	5,658,725	08/19/97	Schlieper et al.	435	5	
	5,738,984	04/14/98	Shoseyov	435	4	
	5,851,781	12/22/98	Adamczyk et al.	435	7.9	
	5,863,740	01/26/99	Klentsch-Engel et al.	435	7.5	
	5,880,270	03/09/99	Berninger et al.	530	391.1	
	5,958,703	09/28/99	Dower et al.	435	7.1	
	5,965,131	10/12/99	Griffiths et al.	424	133.1	
	5,965,457	10/12/99	Magnani	436	518	

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes/No

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

		Ashikaga, K. et al. (1988), "Intramolecular End-to-End Reactions of Photoactive Terminal Groups Linked by Poly(oxyethylene) Chains," Bull. Chem. Soc. Jpn. 61:2443-2450
		Bayer, E. and Wilchek, M. (1990), "Biotin-Binding Proteins: Overview and Prospects," Methods Enzymol. 184:49-51.
		Brockhausen, I. et al. (1989), "Control of glycoprotein synthesis," J. Biol. Chem. 264:11211-11221.

86



Form PTO-1449		
ATTY DOCKET NO. 64-98 A		SERIAL NO. 09/839,884
APPLICANT Aebersold et al.		FILING DATE April 20, 2001 GROUP 1632
Previously cited in 09/383,062		
<p>Chapman, A. et al. (1980), "The primary glycosylation defect in class E Thy-1-negative mutant mouse lymphoma cells is an inability to synthesize dolichol-P-mannose," <i>J. Biol. Chem.</i> 255:4441-4446.</p>		
<p>Clauser, K.R. et al. (1995), "Rapid mass spectrometric peptide sequencing and mass matching for characterization of human melanoma proteins isolated by two-dimensional PAGE," <i>Proc. Natl. Acad. Sci. USA</i> 92:5072-5076.</p>		
<p>De Leenheer, A.P. and Thienpont, L.M. (1992), "Applications of isotope dilution-mass spectrometry in clinical chemistry, pharmacokinetics, and toxicology," <i>Mass Spectrom. Rev.</i> 11:249-307.</p>		
<p>DeRisi, J.L. et al. (October 1997), "Exploring the metabolic and genetic control of gene expression on a genomic scale," <i>Science</i> 278:680-6</p>		
<p>Dongré, A. R. et al. (October 1997), "Emerging tandem-mass-spectrometry techniques for the rapid identification of proteins," <i>Trends Biotechnol.</i> 15:418-425.</p>		
<p>Ducret, A. et al. (March 1998), "High throughput protein characterization by automated reverse-phase chromatography/electrospray tandem mass spectrometry," <i>Prot. Sci.</i> 7:706-719.</p>		
<p>Eng, J. et al. (1994), "An approach to correlate tandem mass spectral data of peptides with amino acid sequences in a protein database," <i>J. Am. Soc. Mass Spectrom.</i> 5:976-989.</p>		
<p>Figeyls, D. et al. (July 1998), "Electrophoresis combined with novel mass spectrometry techniques: Powerful tools for the analysis of proteins and proteomes," <i>Electrophoresis</i> 19:1811-1818.</p>		
<p>Figeyls, D. and Aebersold, R. (May 1998), "High sensitivity analysis of proteins and peptides by capillary electrophoresis tandem mass spectrometry: Recent developments in technology and applications," <i>Electrophoresis</i> 19:885-892.</p>		
<p>Figeyls, D. et al. (November 1996), "Protein identification by solid phase microextraction-capillary zone electrophoresis-microelectrospray-tandem mass spectrometry," <i>Nature Biotech.</i> 14:1579-1583.</p>		
<p>Figeyls, D. et al. (August 1997), "A microfabricated device for rapid protein identification by microelectrospray ion trap mass spectrometry," <i>Anal. Chem.</i> 69:3153-3160.</p>		
<p>Freeze, H. H. (November 1998), "Disorders in protein glycosylation and potential therapy," <i>J. Pediatrics</i> 133:593-600.</p>		
<p>Freeze, H. H. (February 1999), "Human glycosylation disorders and sugar supplement therapy," <i>Biochem. Biophys. Res. Commun.</i> 255:189-193.</p>		

RECEIVED
JAN 17 2002
TECH CENTER 2000
USPTO



Form PTO-1449

ATTY DOCKET NO. 64-98 A

SERIAL NO. 09/839,884

FILING DATE April 20, 2001

APPLICANT Aebersold et al.

GROUP 1632

Previously cited in 09/383,062

TECH CENTER 1600/298 JAN 17 2002

		Gamper, H.B. (1993), "Facile Preparation of Nuclease Resistant 3' Modified Oligodeoxynucleotides," <i>Nucl. Acids Res.</i> 21 :145-150
		Garrels, J. I. et al. (August 1997), "Proteome studies of <i>Saccharomyces cerevisiae</i> : identification and characterization of abundant proteins. Electrophoresis," 18 :1347-1360.
		Gerber, S.A. et al. (February 1999), "Analysis of rates of multiple enzymes in cell lysates by electrospray ionization mass spectrometry," <i>J. Am. Chem. Soc.</i> 121 :1102-1103.
		Glaser, L. (1966) Phosphomannomutase from yeast. In <i>Meth. Enzymol.</i> Vol. VIII, Neufeld, E. F.; Ginsburg, V. Eds; Academic Press: New York 1966, pp. 183-185.
		Gygi, S.P. et al. (March 1999), "Correlation between protein and mRNA abundance in yeast," <i>Mol. Cell. Biol.</i> 19 :1720-1730.
		Gygi, S.P. et al. (February 1999), "Protein analysis by mass spectrometry and sequence database searching: tools for cancer research in the post-genomic era," <i>Electrophoresis</i> 20 :310-319.
		Haynes, P. A. et al. (May 1998), "Identification of gel-separated proteins by liquid chromatography electrospray tandem mass spectrometry: Comparison of methods and their limitations," <i>Electrophoresis</i> 19 :939-945.
		Hodges, P.E. et al. (January 1999), "The Yeast Proteome Database (YPD): a model for the organization and presentation of genome-wide functional data," <i>Nucl. Acids Res.</i> 27 :69-73.
		Kataky, R. et al. (1990), "Comparative Study of Mono- and Di-substituted 14-Crown-4 Derivatives as Lithium Ionophores," <i>J. Chem. Soc. Perkin Trans. 2</i> (2):321-327
		Kaur, K. J. and Alton, G.; Hindsgaul, O. (1991), "Use of N-acetylglucosaminyltransferases I and II in the preparative synthesis of oligosaccharides," <i>Carbohydr. Res.</i> 210 :145-153.
		Kaur, K. J. and Hindsgaul, O. (1991) "A simple synthesis of octyl 3,6-di-O-(α -D-mannopyranosyl)- β -D-manopyranoside and its use as an acceptor for the assay of N-acetylglucosaminyltransferase I activity," <i>Glycoconjugate J.</i> 8 :90-94.
		Körner, C. et al. (October 1998), "Carbohydrate-deficient glycoprotein syndrome type V: deficiency of dolichyl-P-Glc:Man ₉ GlcNAc ₂ -PP-dolichyl glucosyltransferase," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 95 :3200-3205.
		Link, A. J. et al. (August 1997), "Identifying the major proteome components of <i>Haemophilus influenzae</i> type-strain NCTC 8143," <i>Electrophoresis</i> 18 :1314-1334.

RECEIVED



Form PTO-1449		
ATTY DOCKET NO. 64-98 A	SERIAL NO. 09/839,884	FILING DATE April 20, 2001
APPLICANT Aebersold et al.		GROUP 1632
Previously cited in 09/383,062		
		Link, J. et al. (July 1999), "Direct analysis of large protein complexes using mass spectrometry," <i>Nat. Biotech.</i> In press.
		Mann, M. and Wilm, M. (1994), "Error-tolerant identification of peptides in sequence databases by peptide sequence tags," <i>Anal. Chem.</i> 66:4390-4399.
		McMurry, J. E. and Kocovsky, P. (1984), "A method for the palladium-catalyzed allylic oxidation of olefins," <i>Tetrahedron Lett.</i> 25, 4187-4190.
		Morris, A.A.M. and Turnbull, D.M. (1994), "Metabolic disorders in children," <i>Curr. Opin. Neurol.</i> 7:535-541.
		Oda, Y. et al. (June 1999), "Accurate quantitation of protein expression and site-specific phosphorylation," <i>Proc. Natl. Acad. Sci. USA</i> 96:6591-6596
		Okada, S. and O'Brien, J.S. (1968), "Generalized Gangliosides: Beta-Galactosidase Deficiency," <i>Science</i> 160:1002-1004.
		Opiteck, G.J. et al. (April 1997), "Comprehensive on-line LC/LC/MS of proteins," <i>Anal. Chem.</i> 69:1518-1524
		Paulsen, H. and Meinjohanns, E. (1992), "Synthesis of modified oligosaccharides of N-glycoproteins intended for substrate specificity studies of N-acetylglucosaminyltransferases II-V," <i>Tetrahedron Lett.</i> 33:7327-7330.
		Paulsen, H. et al. (1993) Synthese von modifizierten Oligosacchariden der N-Glycoproteine zur Untersuchung der Spezifität der N-Acetylglucosaminyltransferase II," <i>Liebigs Ann. Chem.</i> pp. 721-735.
		Pennington, S. R. et al. (April 1997), "Proteome analysis: from protein characterization to biological function," <i>Trends Cell Bio.</i> 7:168-173.
		Qin, J. et al. (October 1997), "A strategy for rapid, high-confidence protein identification," <i>Anal. Chem.</i> 69:3995-4001
		Romanowska et al. (1994), "Serological and Structural Features of <i>Hafnia Alvei</i> Lipopolysaccharides containing D-3-hydroxybutyric Acid," <i>FEMS Immunol. Med. Microbiol.</i> 8(1):83-8
		Romanowska, A. (1994), "Michael Additions for Syntheses of Neoglycoproteins," <i>Methods Enzymol.</i> 242:90-101
		Ronin, C. et al. (1981), "Transfer of glucose in the biosynthesis of thyroid glycoproteins. I. Inhibition of glucose transfer to oligosaccharide lipids by GDP-mannose," <i>Biochim. Biophys. Acta</i> 674, 48-57.
		Ronin, C. et al. (1981a), "Synthetic substrates for thyroid oligosaccharide transferase. Effects of peptide chain length and modifications in the -Asn-Xaa-Thr-region," <i>Eur. J. Biochem.</i> 118, 159-164.

SEARCH CENTER 1600/2900

JAN 17 2002

RECEIVED

gjt



Sheet 5 of 6

Form PTO-1449

ATTY DOCKET NO. 64-98 A

SERIAL NO. 09/839,884

FILING DATE April 20, 2001

APPLICANT Aebersold et al.

GROUP 1632

Previously cited in 09/383,062

		Ronne, H. (1995), "Glucose repression in fungi," <i>Trends Genet.</i> 11:12-17.
		Roth, F.P. et al. (October 1998), "Finding DNA regulatory motifs within unaligned noncoding sequences clustered by whole-genome mRNA quantitation," <i>Nat. Biotechnol.</i> 16:939-945
		Rush, J. S. and Wachter, C. J. (1995), "Transmembrane movement of a water-soluble analogue of mannosylphosphoryldolichol is mediated by an endoplasmic reticulum protein," <i>J. Cell. Biol.</i> 130:529-536
		Rush and Wachter (1995), "Method for determination of cellular levels of guanosine-5'-diphosphate-mannose based on a weak interaction with concanavalin A at low pH," <i>Anal. Biochem.</i> 224(2):494-501
		Schachter, H. (1986), "Biosynthetic controls that determine the branching and microheterogeneity of protein-bound oligosaccharides," <i>Biochem. Cell Biol.</i> 64, 163-181
		Sechi, S. and Chait, B.T. (December 1998), "Modification of cysteine residues by alkylation. A tool in peptide mapping and protein identification," <i>Anal. Chem.</i> 70:5150-5158.
		Shalon, D. et al. (July 1996), "A DNA microarray system for analyzing complex DNA samples using two-color fluorescent probe hybridization," <i>Genome Res.</i> 6:639-645.
		Shevchenko, A. et al. (December 1996), "Linking genome and proteome by mass spectrometry: large-scale identification of yeast proteins from two dimensional gels," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 93:14440-14445.
		Shevchenko, A. et al. (March 1996), "Mass spectrometric sequencing of proteins silver-stained polyacrylamide gels," <i>Anal. Chem.</i> 68:850-858.
		Tan, J. et al. (October 1996), "Mutations in the MGAT2 gene controlling complex glycan synthesis cause carbohydrate deficient glycoprotein syndrome type II, an autosomal recessive disease with defective brain development," <i>Am. J. Hum. Genet.</i> 59:810-817
		Velculescu, V. E. et al. (January 1997), "Characterization of the yeast transcriptome," <i>Cell</i> 88:243-251.
		Wilbur et al. (November 1997), "Biotin Reagents for Antibody Pretargeting. 2. Synthesis and <i>in Vitro</i> Evaluation of Biotin Dimers and Trimers for Cross-Linking of Streptavidin," <i>Bioconjugate Chem.</i> 8(6):819-832
		Wilbur, D.S. et al. (1997), "Biotin Reagents for Antibody Pretargeting. Synthesis, Radioiodination, and <i>in Vitro</i> Evaluation of Water Soluble, Biotinidase Resistant Biotin Derivatives," <i>Bioconjugate Chem.</i> 8:572-584.
		Yates, J. R. et al. (1995), "Method to correlate tandem mass spectra of modified peptides to amino acid sequences in the protein database," <i>Anal. Chem.</i> 67:1426-1436

RECEIVED
JAN 17 2002
TECH CENTER 1600/2900

grb



Sheet 6 of 6

Form PTO-1449			
ATTY DOCKET NO. 64-98 A	SERIAL NO. 09/839,884	FILING DATE April 20, 2001	
APPLICANT Aebersold et al.		GROUP 1632	
Previously cited in 09/383,062			
EXAMINER	DATE CONSIDERED		
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p> <p style="text-align: center;"><i>EG</i></p>			

RECEIVED
JAN 17 2002
TECH CENTER 1600/2900



Page 1 of 1

TECH CENTER 1600/2900
JAN 14 2002

RECEIVED

Form PTO 1449		
ATTY DOCKET NO. 64-98A	SERIAL NO: 09/839,884	FILING DATE: April 20, 2001
APPLICANT: Aebersold et al.		GROUP: 1632

Previously cited in 09/383,062

U.S. PATENT DOCUMENTS

Exmr Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
		5,650,270	07/22/97	Giese et al.	435	6	

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes/No
		WO 90/04786	3 May 90		G01N 33	53	

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

			Paulsen, H. et al. "Building units of oligosaccharides: CVII. Synthesis of modified oligosaccharides of N-glycoproteins for substrate specificity studies of N-acetylglucosaminyltransferase II." (1993) <i>Liebigs Annalen der Chemie</i> 7:721-735			

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

12/20/89

86



Page 1 of 1

RECEIVED
TECH CENTER 1600/2900
JAN 17 2002

Form PTO 1449

ATTY DOCKET NO. 64-98A	SERIAL NO: 09/839,884	FILING DATE: April 20, 2001
APPLICANT: Aebersold et al.		GROUP: 1632

Previously cited in 09/383,062 by Examiner

U.S. PATENT DOCUMENTS

Exmr Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	5,438,017	08/01/95	Allen et al.	436	89	

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes/No

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

Duncan, M.W. and Poljak, A. "Amino Acid Analysis of Peptides and Proteins on the Femtomele Scale by Gas Chromatography/Mass Spectrometry" (March 1998) Analytical Chemistry 7(5):890-896

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

12/20/89

gj



Page 1 of 1

TECH CENTER 600/2900
JAN 17 2002

RECEIVED

Form PTO 1449

ATTY DOCKET NO. 64-98A	SERIAL NO: 09/839,884	FILING DATE: April 20, 2001
APPLICANT: Aebersold et al.		GROUP: 1632

Previously cited in 09/383,062

U.S. PATENT DOCUMENTS

Exmr Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
		5,534,440	07/09/96	Aebersold et al.	436	89	
		6,057,096	05/02/00	Rothschild et al	435	6	

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes/No

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

			Gygi, S. P. et al., "Quantitative analysis of complex protein mixtures using isotope-coded affinity tags" (October 1999) <i>Nature Biotechnology</i> 17:994-999

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

12/20/89

80